

Recommendations and thoughts on the landscaping at Aurora and past and future design concerns.

Aurora is lucky to have such an extensive and interesting landscape, which has served the building well over the years for presentation and amenity. The original design won an award by AILA (Australian Institute of Landscape Architects). There have been some design changes over the years but these have largely respected the integrity of the original design.

It has been maintained to an acceptable standard over the years, however some areas now require some reappraisal in the light of plant performance.

Aspects of the original design that are worth retaining:

The most distinctive feature is the rows of healthy trees.

The geometry of the ground layers with strong rectangular lines with well defined concrete edges and contrasting treatments within the spaces. These aspects translate well when viewed from apartment windows.

The combination of vertical levels with paving, lawn, groundcovers, shrubs, tall grasses and trees creates an interesting and pleasing entrance experience to residents and visitors.

Good use has been made of a variety of colours and foliage widths in the groundcovers.

Tree species are interesting varieties and have been planted in rows, which emphasises the geometry of the overall design.

Aspects of the design that need rethinking and changing:

Tree canopies need to be considered. If just left, some could get quite large and create a rainforest rather than a neat and tidy entrance that complements the clean lines of the building.

The planting of groundcovers is somewhat geometric with plants evenly spaced in rows with rock mulch around them. The rock mulch looks like Lilydale topplings, which is associated with temperature variations, compaction and alkalinity issues and the plants involved do not look that healthy.

There is a path between two rows of fig trees near the property boundary with #580. The original intention of this was a pleasant walk to or from the restaurant. The gate to the restaurant has been kept locked for years.

Presumably this was to prevent people quietly exiting the restaurant without paying. If the restaurant is unlikely to reinstate this entrance then this space could be changed.

At present all the groundcovers are strap leaved plants, a possible design change would be the inclusion of some small flowering shrubs.

Detailed analysis of issues and suggested changes:

TREES:

The pruning objectives for all trees are dense canopies with a neat formal rounded to oval shape. There should be uniformity of shape and size within each row of trees. The insides of canopies should be pruned of deadwood where this is visible. Canopies should be crown lifted (pruning of lower branches and/or foliage) to provide a clean view of the trunks. This technique is known as pleaching. <http://thelauriedge.blogspot.com.au/2011/02/pleached-perfect.html>. The canopies should be pruned so they do not overhang adjacent garden beds and to promote more vigorous growth.

Future pruning works on all Aurora's trees should be every 3 to 5 years, depending on growth.

Hill's figs – *Ficus microcarpa* var. *hillii*

The typical mature height of these trees is 15 metres (www.metrotrees.com.au) and they are well on the way to this at present.

All the figs need pruning for deadwood and to contain the canopies to a similar height to the previous pruned (old pruning cuts are evident) or 1 to 1.5m higher. Canopies should be merged in the middle and with those in #580.

Crown lift to 1.5m but where canopies overhang pedestrian areas (footpath and internal paths) canopy height should be 2m.

The black plastic that covers the base of trunks or is visible elsewhere should be cut away as it is ugly.

The canopies overhang the Alto property and on that side they also overhang the footpath and the nature strip. The adjacent part of the Alto building does not yet seem actively occupied but if that situation changed they may not want the area dominated by Aurora trees. Vegetation on adjoining properties (including Council land) increases public liability risk. Negotiation with Alto Owners Corporation would be required. Achieving the formal neat look that would match the architecture of Aurora would mean significant pruning of these trees as the pruning has been left for some time. Figs are very vigorous trees and would quickly grow back from severe pruning.

Red leaf Photinias – *Photinia robusta*

The typical mature size of these trees is 8 by 8 metres (www.specialitytrees.com.au). These trees should be pruned to a lower canopy height of 1.2 – 1.5m from the ground and the top to be 0.5 – 1m lower than their present overall height. They should be pruned so that they do not overhang the water feature, the Aurora and Il Locale sign or the adjacent garden beds.

Strawberry trees – *Arbutus* spp. probably *canariensis*

The typical mature height of these trees is 6 – 9 m (Metro Trees). These should be crown lifted of foliage to 1.2 – 1.5m to show off their fabulous trunks as well as to keep the design. Crowns need to be pruned to be level with garden bed edges for a neater appearance and leveled off at the top and from now on and ongoing maintenance to that height.

Coral barked Japanese Maple trees – *Acer palmatum* 'Sango Kaku'

The maple nearest the path to the rear of the property is a different variety and doesn't have the red stems and coral leaf tones of the other trees. It was a replacement following vandalism. Although a bit irritating, the tree is healthy and worth retaining. The tree in the centre of the row nearer the street is not as healthy as the other trees. It should be monitored. Replacement is problematic as it would look much smaller for many years.

This type of tree is not particularly tolerant of hot summer winds, this is why there is a fair bit of deadwood. The trees look good overall so it's best to just keep pruning this. Removing these trees would be unpopular.

A suggested small tree species to plant there as a row of 3 plants is Bridal Star *Ricinocarpus tuberculatus*, which is a Western Australian native that grows to 3 – 4 X 2m. Its foliage is fine and dark green and if pruned occasionally is densely borne. In spring it is covered by masses of small white star shaped flowers that are highly perfumed. Initially it should be tip pruned to keep a compact growth habit and to form a neat trunk and rounded canopy form. After that tip pruning after flowering every year is all that is required. <http://www.landsdaleplants.com.au/planet/wedding-bush/>

Lilly Pillies – *Syzygium australe*

These trees can grow to a height and spread 10m and 4m. They are healthy and providing a screen from Alto. Their canopies are colliding with the two Japanese Maples near the fence, with the gym garden trees (almost, just a matter of time) and with Alto trees. They should be pruned so they are not competing with the Japanese maple and up to the edge of the path so they don't reach the gym garden trees. Pruning on the Alto side should be negotiated with their Owners Corporation. Their heights should be kept to about their current height and they need some deadwood pruning.

Evergreen Maenolias – *Michelia doltsopa*

These trees grow to a height and width of 9 and 3m (Specialty trees). They are healthy but the canopies are opening up a bit. They should be lightly pruned all over to create a tighter form plus the removal of deadwood.

An additional row of garden beds between the figs and the Photinias. There seems no particular reason why there are no trees there.

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Replacement considerations:

The decision to replace plants needs to be considered in the light of budget availability. Tree work is the most overdue and should be done by qualified and competent Arborists with good knowledge of Occupational Health & safety and with suitable climbing equipment.

Other, non-tree work could be done over time.

Any work that involves public risk should be performed as soon as possible. Sometimes the location needs to be considered as well, for example an unsafe path in a seldom-used location is less urgent than a less critical fault in a high use area.

When deciding on replacement species and varieties for groundcovers it is preferable to order plants well in advance to ensure likelihood of supply.

Another issue worth considering is to use spreading plants in the groundcover beds rather than individual tussocks with rock mulch between them. This could mean some continuous blocks of non-strap leaved plants. They could be hedged to keep them from growing into lawn areas or paths. This effect would be just as sympathetic to the geometry of the overall design but would lead to healthier plants that performed well without too much interference.

A greater variety of plants in the design would provide some seasonal variation of flowering times.

The concept of dividing garden beds of liriopie with a variegated variety could be rethought. It is difficult to get plants to perform the same with differing levels of photosynthetic pigment in them. It might work better to have continuous beds of one variety. There would be greater variety in the design if we added some broader leaved plants.

GROUNDCOVERS:

The Lilydale topplings mulch should be removed and replaced with a more plant friendly material such as woodchip mulch or similar.

New Zealand Flax – *Phormium tenax* 'Bronze Warrior' <http://www.benarumseries.com/productinfo.asp?ID=19589> 1.5 X 1.5m, *Phormium tenax* 'Bronze Baby' <http://www.dinsan.com.au/plants-products/plant-database/phormium/phormium-bronze-baby> <http://www.dapplelandscapeesign.com.au/grasses-strappy-leaved-plants/medium-grasses-strappy-leaved/Phormium-tenax-Yellow-Wave-Yellow-Wave.htm> 0.8 X 0.8m

These plants are tough and performing reasonably well. Maintenance issues include: removal of dead leaves needs to be done regularly; some of the ends look dead and could be pruned back; some plants have become quite large and others have died leaving big clumps and gaps. Larger clumps can be divided and the offshoots replanted into the gaps. The Yellow Wave leaves look shredded where they rub against the asphalt footpath.

The varieties chosen have attractive variegations however these involve significant maintenance. Larger leaves tend to outgrow the variegations then the (more vigorous) single colour leaves dominate. This means that the Bronze Warrior is mostly a fairly dull grey without the attractive pink stripes. The only way to prevent this is to regularly prune out all the non-variegated leaves, which is quite labour intensive.

Suggested replacement plants –

For the garden beds adjacent to the glass fence separating the garden from the restaurant open area:-

Smooth Flax Lily – *Dianella longifolia* http://plantsandlandscapes.com.au/prov_site/Dianella_longifolia

This clumping plant has long slightly silvery green foliage up to 0.8m and flower stems to 1m. Pale blue flowers in spring to summer followed by dark blue to purple berries. This plant is local so can be obtained as cheaper tubestock.

As a replacement to the variegated Phormiums:-

Red Tasmanian Flax Lily – *Dianella tasmanica* 'Tas Red' <http://www.australianplants.com/plants.aspx?id=1712>

This plant cultivar has attractive red tones at the bases of its wide leaves. It grows to 0.5m and has blue flowers in spring followed by purple berries. It has a Phormium-like habit.

As a replacement for a coloured Phormium bed or the central pale Liriopie bed and to create a different effect than the exclusive use of strap leaved plants:-

Sedum 'Autumn Joy' – *Hydratophyllum spectabile* 'Autumn Joy' <https://www.diggers.com.au/shop/flowers/drought-tolerant-garden-sedum-autumn-joy/peau/>

This plant is a succulent growing to 0.7 X 0.3m that is winter dormant but has a long flowering period Feb – Apr with large pale pink flowerheads that gradually turn to coppery red. This plant needs full sun. The foliage is greyish and pale. After flowering the foliage and stems die back and should be cut back to the ground but the old flowers can remain for long term-effect.

Turf Lily – *Liriopie muscari*

These plants are growing well along the path to the rear of the property where there is shade. The ones in the front sections are looking snail bitten and tatty. The variegated variety of these plants is considerably less vigorous due to their reduced photosynthetic pigment. This compromises the design, which never factored in differential plant growth. Where these are under trees they are too tall and reduce the view of the attractive trunks.

The liriopie beds growing in full sun look even worse.

The practice of pruning them is a standard horticultural technique but it leads to dense lower areas with much thatch. It is also quite labour intensive. The other way of reducing its vigour is to regularly divide the clumps with a spade. This is harder and more time consuming physical work but the effect would last longer.

One of the rear beds of pale liriopies needs additional soil.

Replacement plants for consideration:-

Aussie Blue Grass - *Lomandra glauca* 'Aussie Blue Grass' <http://www.gardeningwithangus.com.au/lomandra-glauc-aussie-blue-grass-lomandra/>

This cultivar has upright foliage, which is greyish blue, the older leaves are greener creating a contrast effect. It has been termed "Native Liriopie". It grows in sun or part shade to 0.4 X 0.45m.

Star Jasmine – *Trachelospermum jasminoides*

<http://www.abc.net.au/gardening/stories/s1866512.htm> This plant is vigorous and has fragrant white flowers in Spring and Summer and dark glossy foliage. It grows well in sun and shade and can be pruned to a neat shape as a groundcover. It must be pruned from the tree trunks so it doesn't climb up.

Blue Flax Lily 'Little Jess' - *Dianella caerulea* 'Little Jess' - <http://www.bluedale.com.au/our-selection/strappy-leaf-plants/little-jess-dianella-caerulea-dcmp01>

This cultivar is a compact clumping plant 0.4 X 0.45m with shiny green arching foliage. It grows in full sun to 90% shade and blue flowers held above the foliage followed by purple berries.

Kangaroo Paws – *Anigozanthus* cultivars

These plants are a bit disappointing but they may be worth giving a go without the Lilydale topplings and using the best two varieties and a native specific (low phosphorous) fertiliser. The link below gives good information on their care and maintenance.

<http://www.homedesigndirectory.com.au/gardening/growing-kangaroo-paws.php>

The kangaroo paw beds should be treated by removing the rock mulch (?Lilydale topplings) and replacement with topsoil where necessary and a wood chip mulch. Infill planting can be done with reliable forms. Leaves that are turning black or that have died should be removed. Existing larger healthy plants can be divided but it may take a while for new plants to get going.

Replacement varieties are the two most reliable ones:-

Big Red Kangaroo Paw – *Anigozanthus* hybrid 'Big Red'

The foliage grows to 0.6 X 0.6m and the flowerheads to 1.2m. Flowering occurs throughout spring and summer and the flowers are velvety red.

Yellow Gem Kangaroo Paw - *Anigozanthus* hybrid 'Yellow Gem'

http://www.hillfzr.com.au/search/factsheet.asp?masterlist_id=6

This plant grows to 0.7m h x w with flower stems up to 2m high in spring to summer.

OTHER ISSUES

Restaurant path

There could be a seat installed at the end of the path if the restaurant no longer requires access to or from this path. Otherwise the area is a wasted dead space. This is a quiet corner of the landscape where someone could sit for a while to enjoy the ambience. A bench similar to those near the entrance to the building from the rear path would be suitable. If people had concerns regarding homeless persons using it an arm-rest could be added to the middle of it. The restaurant owner should be consulted first.

One of the concrete step pavers needs relaying to prevent tripping. The grey and white stones should be separated.

Grass areas

These are competently maintained at the moment. The only issue is the area near the figs on the #580 side. The reason for this is that the fig trees are vigorous and compete with the grass. Pruning the trees may help a bit however it must be accepted that the figs have a greater landscape impact.

Camellias

These are making a valuable contribution to the landscape especially by providing many lovely red flowers in winter against the dark foliage. They are being well pruned. The front row looks spindly compared with the other row however this is because from the path the viewer only sees the shaded side. There is no horticultural remedy for this. The camellias are worth keeping.

Side path

The liriopies along the path are healthy but their vigorous growth and proximity to lights and the path make them a particularly high maintenance landscape.

Suggested replacement species - Cliveas – *Clivea miniata*

These grow to 0.6 X 0.6m and tolerate heavy shade and actually flower well in it. It is available in orange, peach pink and yellow – cream colours and are generally trouble free. They also grow in the gym garden.

<http://www.igarden.com.au/plant-type.jsp?tc=clivia>

The amount of space for plants is different on each side of the path as this accommodates the root space required for the lilly pillies, however it means that there is a lot of pruning required on the building side. Symmetry is worthwhile so there are no real solutions. Not many plants take that much shade. Clivia would still need to be pruned regularly to fit the space.

OTHER PLANTS OF INTEREST

Black anther flax-lily - *Dianella revoluta*

The local version of this plant has dark green foliage that is a bit silvery 0.5 X 0.5m with pale blue flowers on branched stems above the leaves to 0.7m followed by small shiny blue berries. They grow well under trees or in the open. They are easy to grow and long lived. They spread which means gaps are filled. <https://www.anbg.gov.au/gnp/interns-2007/dianella-revoluta.html>

Coast flax lily - *Dianella brevicaulis* - http://www.bushlandflora.com.au/plants_Native/wholesale_nursery_m/DianellaBrevicaulis-FlaxLily/Dianella-brevicaulis-flax-lily.php

This local plant is similar to *D. revoluta* but the pale blue flowers are within the foliage. It takes full sun to part shade and doesn't require pruning. It forms a rounded tussock and doesn't spread.

Mallee blue flower - *Halgonia cyanea*

This small shrub grows to 0.4 X 0.4m and is dense and bushy and in summer bears deep blue star shaped flowers. It needs a sunny position. <http://anpsa.org.au/h-cya.html>

Thyme leaved honey myrtle - *Melaleuca thymifolia* 'Pink lace'

This is a small shrub of 0.5 X 0.5m with many pale pink flowers in spring and summer. It does best in full sun.

<http://anpsa.org.au/m-thym.html>

Cottonheads - *Cowstylis candidans*

These plants are grass like (related to kangaroo paws) 0.3 X 0.3m with greyish foliage and clumps of yellow flowers throughout spring. They need full sun to light shade.

<https://www.anbg.gov.au/gnp/interns-2007/dianella-revoluta.html>

Lomandra 'seascape' - *Lomandra confertifolia* ssp. *Rubiginosa*

<http://www.benaranurseries.com/productinfo.asp?ID=48131>

This cultivar has a weeping habit and forms a clump. The foliage is a soft blue/grey and the small yellow flowers in summer are highly fragrant. It grows in full sun to full shade.

Lomandra longifolia 'cassica' <http://www.homedesigndirectory.com.au/gardening/plant-finder/plant-descriptions/lomandra-longifolia/cassica/?plant-id=288>

This cultivar has broad pale blue-green foliage and masses of perfumed flowers in spring. It grows in full sun to shade to 1 x 1m.

Creeping Boobialla - *Myoporum parvifolium*

<http://greensteadnursery.com.au/species/ground-covers/myoporum-parvifolium.html>

A useful, vigorous and attractive local groundcover with pale green fine but densely borne foliage that grows in all light conditions. It is easily pruned to create a low hedge. It grows to 0.1 X 1.5m. It has attractive white flowers in spring and summer.